

## ELECTROMAGNETIC LOGGING TOOL CALIBRATION SYSTEM

### **Abstract**

Techniques for calibrating an electromagnetic logging tool equipped with a plurality of antennas, with at least one antenna having its axis at an angle with respect to a tool axis, include disposing a test loop about the tool such that an axis of the tool and a plane on which the test loop lies form a tilt angle that is between about 0 and 90 degrees. An induced signal is measured at one of the antennas by energizing another of the antennas. Embodiments analyze the induced signal corresponding to a max or min extrema associated with a coupling effect due to the test loop. In other embodiments a corrected signal is compared with a calculated signal.